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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,510	05/19/2004	Gregory John Billington	07703-414001	6776

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EXAMINER
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BEAUCHAINE, MARK J

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/849,510	<b>Applicant(s)</b> BILLINGTON ET AL.	
	<b>Examiner</b> Mark J. Beauchaine	<b>Art Unit</b> 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/546,126.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/20/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement (IDS) filed 20 December 2004 fails to comply with 37 CFR 1.98(b)(5), which requires that each publication be identified by date. Although the documents listed in the Other Documents section of the IDS have been found in the file of record, said documents fail to refer to specific dates of publication and have not been considered.

### ***Reissue Applications***

The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Number US 6,250,452 B1 by Partyka et al (hereinafter "Partyka") in view of Patent Number 4,669,596 by Capers et al (hereinafter "Capers"). The vending system disclosed by Partyka incorporates location unit 104, microcontroller 120, digital computer of host unit 106 (see column 9, lines 63 plus) and vending machine 10 that read on the Applicant's money handling apparatus, internal controller, external controller and further money handling device, respectively. Partyka further discloses a communications line connecting location unit 104 with host 106 that reads on the Applicant's first port, and a communications line connecting location unit 104 with vending machine 10 that reads on the Applicant's second port (see Figure 2). A communications protocol used in conjunction with said communications lines to allow a host machine to direct and receive feedback from vending machines is inherent in such a communications system and reads on the Applicant's communications protocol.

Still further, said "[v]ending machine 10 includes coin changer 12 [and] bill validator 14" (column 2, lines 47 plus) that read on the Applicant's first and second types of money handled.

Although Partyka fails to disclose communications ports that are removably connected to apparatus components, the use of such connections associated with components in vending apparatus is well known in the art. Capers teaches a vending machine that incorporates a detachable accessory 30 in communication with vending machine 10 via detachable adapter 34. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the adapter 34 of Capers into

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the communications lines of Partyka to provide an effective means of allowing maintenance personnel to change out defective or obsolete vending system components.

Regarding claim 2, although the vending machines 10 of Partyka incorporates coin and bill apparatus as money handling means, the use of a card reader such as a debit card, credit card, smart card, etc as means of money medium are well known in the vending art and would have been obvious to one of ordinary skill to provide a customer with a variety of payment means involved with purchasing a vend machine product.

Regarding claims 4 and 5, the use of bus-oriented and MDB communications protocols are well known in the art and would have been obvious to one of ordinary skill to provide effective industry-recognized communications means to standardize maintenance and operation of the vending system.

Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Partyka in view of Capers as applied to claim 1 above, and further in view of Patent Number 5,694,326 by Warn et al (hereinafter "Warn"). Although Partyka fails to disclose microcontroller 120 as distinguishing between first and second types of money handling apparatus via a code received from vending machine 10, the identification of money handling apparatus in money exchange networks is well known in the art. Warn teaches a card reader configuration 50 incorporated of a dispensing apparatus incorporated within a point of sale network. Said network incorporates both credit card

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scanner and a cash register. Warn recognizes dispensers as being in communication via a proprietary protocol to controllers (column 4, lines 23 plus). Said card scanner and cash register of Warn read on the Applicant's first and second money handling apparatus, respectively. Warn further discloses the operation of notifying control center 20 of whether a transaction is to be "credit" or "cash", and thus utilizing the card scanner or cash register, via a flag indicator (column 9, lines 11 plus). Said flag indicator reads on the Applicant's code. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the money handling apparatus and apparatus identifying means of Warn into the vending system of Partyka to provide a customer with payment options, and thus, increase potential sales.

Claims 7-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Partyka in view of Capers in view of Warn. The vending system disclosed by Partyka incorporates location unit 104, microcontroller 120, digital computer of host unit 106 (see column 9, lines 63 plus) and vending machine 10 that read on the Applicant's money handling apparatus, internal controller, external controller and further money handling device, respectively. Partyka further discloses a communications line connecting location unit 104 with host 106 that reads on the Applicant's first port, and a communications line connecting location unit 104 with vending machine 10 that reads on the Applicant's second port (see Figure 2). A communications protocol used in conjunction with said communications lines to allow a host machine to direct and receive feedback from vending machines is inherent in such

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a communications system and reads on the Applicant's communications protocol. Still further, said "[v]ending machine 10 includes coin changer 12 [and] bill validator 14" (column 2, lines 47 plus) that read on the Applicant's first and second types of money handled.

Although Partyka fails to disclose microcontroller 120 as distinguishing between first and second types of money handling apparatus via a code received from vending machine 10, the identification of money handling apparatus in money exchange networks is well known in the art. Warn teaches a card reader configuration 50 incorporated of a dispensing apparatus incorporated within a point of sale network. Said network incorporates both credit card scanner and a cash register. Warn recognizes dispensers as being in communication via a proprietary protocol to controllers (column 4, lines 23 plus). Said card scanner and cash register of Warn read on the Applicant's first and second money handling apparatus, respectively. Warn further discloses the operation of notifying control center 20 of whether a transaction is to be "credit" or "cash", and thus utilizing the card scanner or cash register, via a flag indicator (column 9, lines 11 plus). Said flag indicator reads on the Applicant's code. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the money handling apparatus and apparatus identifying means of Warn into the vending system of Partyka to provide a customer with payment options, and thus, increase potential sales.

Regarding claims 8, 9 and 14, Partyka discloses a memory 128 in communication with microcontroller 120 to record data communicated via a serial

interface. This recordation of data reads on the Applicant's copying of signals of the internal controller.

Regarding claim 10, Partyka further discloses the manipulation of data of host unit 106 (column 5, lines 62 plus). Said data manipulation reads on the Applicant's signal copying of the internal controller.

Regarding claim 12, the use of bus-oriented communication protocols in currency apparatus is well known in the art. Warn teaches data exchange via a standard format using an expansion bus (column 4, lines 52 plus). Said standard format that reads on the Applicant's bus-oriented communications protocol.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Partyka in view of Capers in view of Warn as applied to claim 10 above, and further in view of Patent Number 6,119,053 by Taylor et al (hereinafter "Taylor"). Although Partyka fail to disclose the operation of modifying signal characteristics of a first further device not recognizable by an external controller such a modification is well known in the art.

Taylor teaches a vending machine bus architecture that incorporates first and second buses 108 and 116 that operate via MDB and VCCS communications protocols, respectively ((column 2, lines 55 plus). Furthermore, Taylor recognizes the benefit of converting units of value associated with different protocols by "providing a custom designed converter for converting from the VCCS protocol to MBD protocol" (column 4, lines 28 plus). Said conversion reads on the Applicant's operation of modifying signal characteristics of a first further device not recognizable by an external controller.



It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the conversion operation of Taylor into the vending system of Partyka to provide an effective means of allowing communication between various currency handling apparatus using different communications protocols within the same system.

Claims 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Partyka in view of Taylor. The vending system disclosed by Partyka incorporates location unit 104, microcontroller 120, digital computer of host unit 106 (see column 9, lines 63 plus) and vending machine 10 that read on the Applicant's money handling apparatus, internal controller, external controller and further money handling device, respectively. Partyka further discloses a communications line connecting location unit 104 with host 106 that reads on the Applicant's first port, and a communications line connecting location unit 104 with vending machine 10 that reads on the Applicant's second port (see Figure 2). Although Partyka fails to disclose a conversion of first units of value to second units of value used for communications over said first and second ports, respectively, such a conversion from one communication line to another is well known in the art.

Taylor teaches a vending machine bus architecture that incorporates first and second buses 108 and 116 that operate via MDB and VCCS communications protocols, respectively ((column 2, lines 55 plus). Furthermore, Taylor recognizes the benefit of converting units of value associated with different protocols by "providing a custom

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designed converter for converting from the VCCS protocol to MBD protocol" (column 4, lines 28 plus). Said conversion reads on the Applicant's conversion of first units of value to second units of value (claims 15-19) and output of an amended code (claims 20 and 21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the conversion operation of Taylor into the vending system of Partyka to provide an effective means of allowing communication between various currency handling apparatus using different communications protocols within the same system.

Regarding claim 17, Taylor further teaches a process in which "the primary processor 204 [ ] sequentially polls the various peripherals on the first and second buses 108 and 116, respectively (column 4, lines 19 plus). The step of an peripheral controller receiving an instruction from said primary processor 204 is inherent in said process and reads on the Applicant's reception of a command by the internal controller.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark J. Beauchaine whose telephone number is (571)272-6934. The examiner can normally be reached on 8:00AM through 5:00PM Mondays through Thursdays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571)272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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mjb